



Product Data Sheet & General Processing Conditions

PermaStat® 300 FR A
Polycarbonate (PC)
ESD Protection
Permanently Anti-static
Flame Retardant



This compound has been formulated to meet the <1.0E11 ohm at 30% RH requirement of IEC 60079-0 7.4.2 and the ATEX Directive.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.30	1.30	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0050 - 0.0070 in/in	0.50 - 0.70 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	4.0 ft-lbs/in	214 J/m	D 256
unnotched 1/8 in (3.2 mm) section	25.0 ft-lbs/in	1335 J/m	D 4812
Tensile Strength	8000 psi	55 MPa	D 638
Tensile Elongation	6.0 - 10.0 %	6.0 - 10.0 %	D 638
Tensile Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 638
Flexural Strength	13000 psi	90 MPa	D 790
Flexural Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 790

ELECTRICAL

Volume Resistivity	1E9 - 1E11 ohm.cm	1E9 - 1E11 ohm.cm	D 257
Surface Resistivity	1E10 - 1E12 ohm/sq	1E10 - 1E12 ohm/sq	D 257
Surface Resistance	1E9 - 1E11 ohm	1E9 - 1E11 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	255 °F	124 °C	D 648
Ignition Resistance* Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	6000 - 10000 psi	41 - 69 MPa
Melt Temperature	430 - 470 °F	221 - 243 °C
Mold Temperature	150 - 250 °F	66 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C